Remarks

I. Support For The Amendment

Page 1 of the specification has been amended to recite the priority applications.

Page 10 of the specification has been amended to include a sequence identifier for each sequence. A substitute Sequence Listing is being filed herewith.

Claims 7 and 9 have been amended, and new claims 17-30 have been added.

Support for the amendment of claim 7 is found in original claim 8.

Support for claim 17 is found in the specification at page 19, last line.

Support for claim 18 is found in the specification at page 20, last paragraph to page 21, first line.

Support for claim 19 is found in the specification at page 21, first paragraph.

Support for claims 20 and 26 is found in the specification at page 24, second paragraph.

Support for claims 21-24 and 27-30 is found in the specification at page 24, second paragraph.

Support for claim 25 is found in the specification at page 22, last paragraph, and page 23, third paragraph.

No new matter has been added by these amendments.

II. Substitute Sequence Listing And Statements Under 37 C.F.R. § 1.825

A paper copy of and a computer-readable copy of a substitute Sequence Listing are being filed herewith and that include new SEQ ID NOS: 15 and 16.

SEQ ID NO: 15 is the IgV domain sequence set forth at page 10 of the specification, and SEQ ID NO: 16 is the TCR V domain set forth at page 10 of the specification.

The substitute sheets contain no new matter. The computer-readable copy of the substitute Sequence Listing contains no new matter.

The copy of the substitute Sequence Listing in computer-readable form is the same as the substitute copy of the Sequence Listing.

III. The Rejection Under 35 U.S.C. § 112, Second Paragraph, Should Be Withdrawn

Claims 7-9 were rejected as being indefinite because they depended from non-elected claims. Applicants respectfully traverse this rejection.

Claim 7 has been amended and is now an independent claim. Claim 8 has been canceled. Claim 9 depends from claim 7. Applicants respectfully request that this rejection be reconsidered and withdrawn.

IV. The Rejection Under 35 U.S.C. § 112, First Paragraph, Should Be Withdrawn

Claims 7-9 were rejected for lack of enablement. Applicants respectfully traverse this rejection.

It is the Examiner's view that claims directed to a "binding compound" are not enabled. The Examiner acknowledged at paragraph 10 of the Office Action that the specification is enabling for antibodies. Claim 7 has been amended to recite an antibody or a fragment thereof. Applicants respectfully request that this rejection be reconsidered and withdrawn.

V. The Rejection Under 35 U.S.C. § 102 Should Be Withdrawn

Claims 7-9 were rejected as allegedly anticipated by Adema.[1] Applicants respectfully traverse this rejection.

Claim 7 has been amended to recite an antibody or fragment thereof which specifically binds to an isolated polypeptide consisting of the amino acid sequence of SEQ ID NO: 6. Adema does not disclose the polypeptide having the amino acid sequence set forth in SEQ ID NO: 6 of the present application. Therefore, Adema fails to disclose an antibody or fragment thereof that specifically binds to an isolated polypeptide consisting of the amino acid sequence of SEQ ID NO: 6.

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[1] Adema *et al.*, publication no. WO 98/24906.

The Examiner relies on Bost[2] and Bendayan[3], to support an allegation that Adema discloses an antibody that binds to SEQ ID NO: 6. It is apparently the Examiner's view that because SEQ ID NO: 6 of the present application shares some sequence similarity with SEQ ID NO: 2 of Adema, an antibody that binds specifically to the polypeptide of SEQ ID NO: 2 of Adema would also bind specifically to the polypeptide of SEQ ID NO: 6 of the present application. Applicants respectfully disagree.

Adema does not disclose the polypeptide having the amino acid sequence set forth in SEQ ID NO: 6 of the present application. Therefore, Adema fails to explicitly disclose an antibody or fragment thereof that specifically binds to an isolated polypeptide consisting of the amino acid sequence of SEQ ID NO: 6.

Adema also fails to inherently disclose an antibody or fragment thereof that specifically binds to an isolated polypeptide consisting of the amino acid sequence of SEQ ID NO: 6 of the present application. "The fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic." M.P.E.P. 2112, section IV. To establish inherency, evidence must be provided that makes clear that the missing descriptive matter is necessarily present in the prior art. See M.P.E.P. 2212, section IV (emphasis added).

Here, neither Bost nor Bendayan establish that an antibody that binds specifically to the polypeptide of SEQ ID NO: 2 of Adema would necessarily bind specifically to the polypeptide of SEQ ID NO: 6 of the present application.

The report in Bost that an anti-HIV antibody cross-reacts with IL-2 fails to teach that an antibody that binds specifically to one protein will necessarily bind specifically to another protein. Indeed, Bendayan teaches that cross-reactivity is potentially, not necessarily, problematic. See Bendaya at page 881 ("Concern is raised on this potential problem of getting false-positive cytochemical results by the use of certain [but not all] mAbs.") (Emphasis added; bracketed text added.) Moreover, Bendaya teaches that even if an antibody cross-reacts, cross-reactivity is dependent on the reaction conditions. For example, Bendayan teaches that the monoclonal antibody in

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[2] Bost, K.L. and Pascual, D.W., *Immunological Investigations 17(6&7)*: 577-586 (1988).

[3] Bendayan, M., *J. Histochemistry and Cytochemistry 43(9)*: 881-886 (1995).

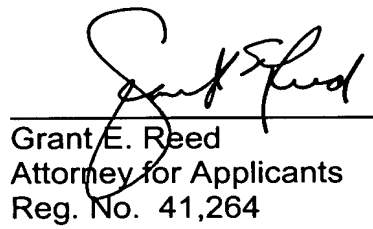
Bendaya was cross-reactive in an immunocytochemistry experiment, but not in an immunochemical experiment. See Bendaya at page 886. Finally, Bendaya emphasizes in the last paragraph of page 886 that false-positive labeling due to cross-reactivity is merely a possibility, not a certainty.

"In relying upon the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art." M.P.E.P. 2112, section IV. Here, the Examiner has failed to provide any basis that reasonably supports the notion that an antibody that binds specifically to the polypeptide of SEQ ID NO: 2 of Adema would necessarily bind specifically to the polypeptide of SEQ ID NO:6 of the present application.

Applicants respectfully request that this rejection be reconsidered and withdrawn.

It is believed that each of the Examiner's objections and rejections have been addressed herein.

Respectfully submitted,



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